ABSTRACT

An elevator group control apparatus is provided that collectively controls an elevator system where a plurality of cars can travel in each shaft independently of each other. It has a destination floor registration device which is installed at each hall to allow passengers to register destination floors and indicate to passengers which cars will serve respectively for the reregistered destination floors. It further comprises; zone setting means for setting priority zones and a shared zone to the upper cars and the lower cars; entrance judgment means for judging whether the shared zone set by the zone setting means is allowed to be entered by an upper or lower car; safety standby means for putting the car on standby based on the judgment result of the entrance judgment means; withdrawal means for withdrawing a car to a withdrawal floor as necessary after a service is completed by the car; assignment candidate selecting means for selecting a car as a candidate for assignment to a destination call generated at a hall if it is judged, according to the destination to be served by each car and the zones set to each car, that the car would cause neither collision nor safety stop; and assignment means for finally determining which car to assign based on the selection result of the assignment candidate selecting means.